Module	Module Description
Module 9	**Supervisor as Trainer and Coach** ▪ Introduction ▪ Objectives ▪ Being a Coach/Trainer ▪ An Adult Learner ▪ Giving Effective Instruction ▪ Feedback
Module 10	**A Healthy Approach to Relay** ▪ Learning Continuum ▪ Adult Education ▪ Dale's Cone of Experience ▪ Elements of Lesson Design ▪ Preparation for Training ▪ Warm Ups ▪ Voice Inflection ▪ Handling Interruptions ▪ Prep for Final ▪ Hearing Thru (TDD - Voice) ▪ Hearing Thru (Voice - TDD) ▪ Voice Thru (TDD - Voice) ▪ Voice Thru (Voice - TDD) ▪ Audiotext ▪ Information Lines ▪ Business Answering Machines ▪ Residential Answering Machines ▪ Beepers ▪ Spanish Answering Machine ▪ TTY Answering Machine

Speech-to-Speech Training Outline

Module 1	**Orientation** ▪ Objectives ▪ Welcome & Introductions ▪ Description ▪ History	What is Speech to Speech Differences from Relay Agent Training
Module 2	**Speech to Speech Customers** ▪ Objectives ▪ Introduction ▪ Phone Image ▪ Characteristics of Speech to Speech Customers ▪ Breaking the Stereotypes	Varying Speech Patterns Voice Synthesizers Types of Calls Transparency & Confidentiality Phrases
Module 3	**Attributes of STS CAs** ▪ Objectives ▪ Patience ▪ Concentration ▪ Listening Skills	Caller Control Sensitivity and Understanding
Module 4A	**Call Processing Procedures** ▪ Objectives ▪ Your Role as CA ▪ Billing ▪ Directory Assistance ▪ Changing CAs	
Module 4B	**Answering Machines and Audiotext** ▪ Answering Machines ▪ SA to SD Answering Machine ▪ Busy/Disconnects ▪ Audiotext Message ▪ Pagers/Beepers	
Module 4C	**Emergency Call Processing** ▪ Emergency Services ▪ EM Numbers ▪ Emergency Incident Form	
Module 4D	**Variations** ▪ Outbound to Relay ▪ Personal Conversations ▪ Operator Calls ▪ Talking on Hold ▪ Keeping the Customer Informed ▪ Differentiating STS and Relay ▪ Outdialing to STS	Using GA Spelling Announcement 900 Calls Request to Hold SD to SD through STS Non STS Calls

Sprint CapTel Training Outline

1.0 Training Summary Outline

1.1 Introduction/Tour

Introductions: Lead trainer, training assistant, Call Center director, and other administrative personnel that may be involved in the first day of training. Prospective CAs are given a tour of the building and the facilities. Each individual is given a security passkey and shown how to use it. The CTI building is a secured facility and the passkey is needed to enter the parking lot after normal business hours, enter the building and gain access to the Call Center floor by stairway or elevator.

1.2 Human Resources Overview

The Human Resource coordinator meets with each group to go over required employment paperwork for the State of Wisconsin, Call Center policies, non-disclosure agreement, confidentiality requirements, expected standards that must be met to pass out of training, and current scheduling needs.

1.3 Videos

Several videos are shown to better demonstrate the job of a CA and how the technology works and how it provides improved communication for our clients. After each video, questions are answered or clarified as needed.

1.4 Mini Demonstration *CapTel* Phone

A brief explanation of the *CapTel* phone and the captioning system is given including commonly used terminology when referring to each party involved in a call. Each trainee is then able to place a short call to experience using the *CapTel* phone. This helps individuals to better understand what we are asking them to provide our clients and what the client experiences.

1.5 Introduction - Developing a Personal Voice Profile

Developing a personal voice profile is the most important step to successfully process *CapTel* calls. CAs are given specific instruction as to how to speak, how to sit, and how to utilize the computer and headset to gain optimal accuracy.

1.6 Introduction - Training Program

The *CapTel* training program allows individuals to listen to various pre-recorded scripts and "re-voice" what they hear directly into the recognition program. Individuals are coached to focus on developing the proper re-voicing technique. This simulates the conversation or voice of the hearing person and having to repeat those words to the computer accurately. Through the progression of various training scripts CAs work to improve their speed of speech while maintaining accurate pronunciation of words based on each script.

1.7 Introduction - Call Handling Tools

Macros are utilized to aid in the speed and accuracy of calls. CAs listen to pre-recorded scripts that consist mainly of macro type words and learn to utilize the macros accordingly.

1.8 Introduction - Call Handling Skills –Pacing a Conversation

CAs are introduced to further call handling skills that allow them to pace various calls in order to provide accurate captions.

1.9 Introduction - Call Handling Skills – Inserting Words

CapTel trains its CAs to insert particular words that the Voice Recognition is not able to caption successfully or in a consistent manner. These words include such things as people's names and regional cities and towns.

1.10 Introduction – How to Handle Various Recordings

CAs are introduced to various types of calls and how to handle each. The importance of verbatim transcription, confidentiality, accuracy and speed are reviewed. CAs view a demonstration by the training assistant, and then each CA is assigned scripts relating to answering machines and automated recordings.

1.11 Introduction & Demo of *CapTel* Conversation

Each trainee observes each end of the "telephone call", (CA, *CapTel* user, hearing person). Each CA assists in making "live" calls to other trainees. This encourages each CA to observe and experience what our clients experience on every call. It also allows the CA who is captioning an opportunity to practice their learned techniques on more realistic, true to life calls.

2.0 Introduction to Call Simulation

Live call simulation allows CAs to gain exposure to real incoming calls landing on the production floor, however they do not interfere with the quality of captions going to the *CapTel* user. New CAs are paired with experienced CAs on the production floor to observe and listen to live calls.

2.1 Call Simulation-Timings

CAs are placed into a rotation of call simulation and receive their first official timing for speed and accuracy baseline timings provide a progress report for each CA and develop a list of improvement areas. This measures the quality and accuracy of re-voicing.

2.2 Review of Baseline Timings

Training Scripts are assigned to the group. One at a time, each CA meets with the trainer to review their baseline timings. Feedback and review of standards and expectation are given.

2.3 Introduction to Correction Tool

The correction tool is introduced to provide CAs with another opportunity to provide the highest quality captions.

2.4 Review Training Elements

CAs meet as a group with the trainer to review the various elements that enable them to provide the quality of captions we expect from each CA.

3.0 Monthly Timing Policy

CTI's monthly timing policy is reviewed with all CAs. The importance of successfully passing these timings is emphasized.

3.1 Call Simulation-Timings

CAs are placed into a rotation of call simulation and receive an official timing. This second timing is a base-line timing in which re-voicing accuracy and call handling skills along with the ability to correct errors are evaluated. Each CA is unaware of when the timing will occur.

4.0 Production Floor Orientation

Current supervisors meet with the group of CAs to go over specific Call Floor procedures, expectations, break adherence, time clock, lockers, emergency plans, and point of contact individuals for questions and assistance.

CAs continue to progress onto the production floor and practice in the training room as needed. CAs are timed each day and progress is reviewed until a CA meets the expected standards or it is determined the individual is not suited for the position. Action is taken as necessary.

Video Relay Service Training Outline and Qualifications

All Sprint VRS interpreters are qualified and will adhere to the Registry of Interpreters for the Deaf (RID) Code of Ethics. The VRS interpreter qualifications are listed below:

- Certified by the NAD at levels III, IV, or V or certified by RID as IC/TC, CI, CSC, LSC or MSC or demonstrated State equivalent. (Note: In rare instances, VIs may process Sprint VRS calls prior to certification based on qualifications and interpreting skills).
- Possess English language skills at a college level.
- Observe strict confidentiality guidelines using RID's Code of Ethics.
- Function in a totally transparent mode.
- Possess strong receptive and voicing skills.
- Possess sensitivity to the needs of the Deaf, Hard of Hearing and hearing parties
- Have a wide range of experience working in the deaf Community utilizing ASL, PSE and Signed English Community utilizing ASL, PSE and Signed English communication modes in social, economic, and educational settings.
- Possess interpreting experience for persons who have minimal language skills.
- Possess computer literacy, including familiarity with current Windows operation system, and be able to operate computer and video equipment.
- Exhibit superior customer service skills.
- Posses the skill to conduct video interpretation sessions with a wide range of individuals.
- Have a good command of English grammar and composition.
- Possess clear and articulate voice communications.
- Be familiar with speech and disability cultures, languages, and etiquette.
- Possess the ability to work under pressure.
- Be capable of working in a multi-tasked environment.
- Have the skill to conduct telephone conversations with a wide range of individuals.
- Be a citizen of the U.S. or an alien who has been lawfully admitted for permanent residence as evidenced by the INS Permanent Resident Card (INS Form I-551).
- Successfully completed, as a minimum, training to include deaf culture, American Sign Language, sensitivity to the capabilities and needs of people with speech impairments, the VI's role in the relay process, and training in interpersonal skills to handle difficult or stressful conversations.
- Beginning college level skills in English grammar and diction.

Appendix C: TRS Pledge of Confidentiality

RELAY CENTER CODE OF ETHICAL BEHAVIOR

AS PART OF THE RELAY SERVICES ORGANIZATION, ALL EMPLOYEES, CONTRACTORS AND VISITORS ARE BOUND TO THE LAWS OF THE STATE AND THE FOLLOWING GUIDELINES:

1. ALL TELECOMMUNICATIONS RELAY SERVICE CALL RELATED INFORMATION IS TO BE STRICTLY CONFIDENTIAL. The employee, contractor or visitor shall not reveal any information acquired during or observing a relay call. Any call-related questions or problems are to be discussed with management.
2. NOTHING IS TO BE EDITED OR OMITTED FROM THE CONTENT OF THE CONVERSATION OR THE SPIRIT OF THE SPEAKER. The employee shall transmit exactly what is said in the way that it is intended in the language of the customer's choice.
3. NOTHING IS TO BE ADDED OR INTERJECTED INTO THE CONTENT OF THE CONVERSATION OR *THE SPIRIT OF THE SPEAKER. The employee shall not advise, counsel, or interject personal* opinions, even when asked to do so by the consumer.
4. TO ASSURE MAXIMUM USER CONTROL, THE EMPLOYEE WILL BE FLEXIBLE IN ADAPTING TO THE CONSUMER'S NEEDS.
5. EMPLOYEES WILL STRIVE TO FURTHER COMPETENCY IN SKILLS AND KNOWLEDGE THROUGH CONTINUED TRAINING, WORKSHOPS, AND READING OF CURRENT LITERATURE IN THE FIELD.

I have read and understand the Relay Center Code of Ethical Behavior. I agree to comply with this Code and any applicable State and Federal laws pertaining to Telecommunications Relay Services and understand that failure to do so will lead to company disciplinary action that may result in my termination *and criminal prosecution.*

_____

EMPLOYEE/CONTRACTOR/VISITOR SIGNATURE DATE

_____ _____

MANAGER/SUPERVISOR SIGNATURE DATE

CapTel CA Pledge of Confidentiality

Confidentiality Policy

- I will not disclose to any individual (outside of a member of the *CapTel* management staff) the identity of any caller or information I may learn about a caller (including names, phone numbers, locations, etc.) on any *CapTel* call.
- I will not act upon any information received while processing a *CapTel* call.
- I will not disclose to anyone the names, schedules, or personal information of any fellow worker at *CapTel* Inc.
- I will not share any information about *CapTel* calls with anyone except a member of the *CapTel* Inc. management staff in order to investigate complaints, technical issues, etc.
- I will continue to hold in confidence all information related to the work and calls I have performed while at *CapTel* Inc. after my employment ends.
- I will never reveal my Captionist ID number in conjunction with my name unless asked by a member of the *CapTel* Inc. management staff.
- I will not share with anyone any technical aspect of my position at *CapTel* Inc. unless asked by a member of the *CapTel* Inc. management staff.

- I will not talk about consumers or call content with any fellow Captionists.
- I will not listen to or get involved in calls taken by fellow Captionists.

I have read the above Confidentiality Policy and understand a breach of confidentiality will result in disciplinary action up to and including termination of employment at *CapTel* Inc. I recognize the serious and confidential nature of my position and therefore promise to abide by these guidelines.

_____

Employee Name Date

Appendix D: E 911 Call Procedure

Sprint uses a system for incoming emergency calls that automatically and immediately transfers the relay user to the nearest Public Safety Answering Point (PSAP). Sprint considers an emergency call to be one in which the user of the relay service indicates they need the police, fire department, paramedics, or ambulance. The following steps will be taken to connect the caller to the correct PSAP:

- The CA, when told by a TTY/ASCII user (non-voice) that an emergency exists, will hit a "hot key".
- The CA's terminal sends a query to the E911 database containing the caller's geographic area ANI.
- The database responds with the telephone number of the PSAP that covers the geographic source of the call, and then, automatically dials the PSAP number, and automatically passes the caller's ANI to the E911 service center.

The CA remains on the line until emergency personnel arrive on the scene unless previously released by the caller. The CA also verbally passes the caller's ANI onto the E911 center operator. If the inbound relay caller disconnects prior to reaching E911, the CA will stay on the line to verbally provide the caller's ANI to the E911 center operator.

When a CapTel user dials 9-1-1, Sprint will route the call directly to the most appropriate PSAP. The 911 PSAP center will receive the caller's Automated Number Identification and Automated Locator Identification. If the call is disconnected, the 911 center will call the CapTel user back.

If a CapTel user had only one line connected to their CapTel phone, captions will not be engaged on the call. A prompt on the phone will instruct the CapTel user how to communicate with the 9-1-1 center to request Voice-Carry-Over communications to begin. The PSAP would be engaged in typing directly to the user, and the user would be able to speak to the 911 dispatcher.

Appendix E Sprint Carrier of Choice Letter of Invitation

(date)

(name)
(Company name)
(address)
(telephone)
(fax)
(e-mail address)

Re: (Customer's name and phone number – requested LEC for COC)

Thank you for your interest to complete (Company Name) Long Distance calls with Sprint Telecommunications Relay Service (TRS). As the default Toll carrier for processing relay calls in more than thirty-two states (32), Sprint currently transports the traffic of customers who have selected you as their Toll carrier. However, many of your customers would prefer to use (Company Name) LD for their toll calls. At present, Sprint TRS is unable to send the toll calls from the regional centers or state access tandem to your network. Hence, this letter is being written to make you aware of a potential service-impacting issue regarding TRS calls and measures your company can take to ensure your customers' toll calls are completed through TRS. The Americans with Disabilities Act of 1990 mandate TRS, and TRS standards are established and are monitored by the Federal Communications Commission (FCC). TRS is a service that links telephone conversations between standard (voice) telephone users and people who are deaf, hard of hearing, deaf-blind, or speech disabled using Text Telephone (TTY) equipment. The State Public Utilities Commission manages the day-to-day operations of TRS and has contracted with Sprint Corporation to provide relay service in their states.
Both, the Americans with Disabilities Act of 1990 and FCC's Order 00-56 on TRS mandate that all states provide TRS and that TRS users shall have equal access to their chosen interexchange carrier and to all other operator services, to the same extent that such access is provided to voice users. In order to provide this access to your customers, your company is encouraged to submit a letter of authorization to accept TRS calls from Sprint.
Attachment A lists the facility-based providers who currently participate at Sprint TRS Carrier of Choice program. If your company (or your facility based provider) is not currently listed, please review the following and determine the appropriate follow-up action needed to be taken:
Facility-based provider

1. If you *are a participating member* at Sprint Carrier of Choice program, please disregard.

2. If you *are not a participating member* at Sprint Carrier of Choice program, you need to establish a network presence at the regional centers or state access tandem and accept calls from Sprint through the industry method of SS7 trunking and TRS billing codes of Info Digit Pair 60, 66, and 67 (see below).

Non-facility based provider

1. If your underlying toll carrier *is a participating member* at Sprint Carrier of Choice program, Sprint can implement the IXC brand name and pass the toll call information to the underlying carrier's CIC code. Please submit a letter of authorization that would advise Sprint to implement the carrier brand name and to send the toll call information to its underlying toll carrier.

2. If your underlying toll carrier *is not a participating member* at Sprint Carrier of Choice program, you will need to work with your underlying toll carrier to establish a network presence at the regional centers or state access tandem and accept calls from Sprint through the industry method of SS7 trunking and TRS billing codes of Info Digit Pair 60, 66, and 67 (see below).

Before you submit a letter of authorization to Sprint TRS, please consider the following four factors:

3. Your CIC codes or your underlying toll carrier CIC codes associated with 1+, 0+, and 0- and International dialing must be loaded into the regional (and/or state) access tandems.

4. You or your underlying toll carrier will need to support SS7 tandem interconnection.

5. You or your underlying toll carrier will need to ensure that your translation tables are updated in order to appropriately receive, rate, and bill Sprint calls per Bellcore industry standards. Sprint calls are designated as ANI II Digit Pair ***60, 66, and 67***.

6. If you utilize more than one underlying toll carrier to carry the toll traffic, select a single toll carrier that will accept Sprint traffic.

***Note**: For detailed information regarding access tandem interconnection and carrier of choice provisioning through Sprint, please refer to ATIS/NIIF-008, the "Telecommunications Relay service – Technical Needs" document.*

Attachment B lists Access Tandem Interconnection locations which Sprint TRS is connected with. The best way to provide access to your Toll network through relay service for your customers is to designate the 13 Sprint Regional TRS center/Access Tandem combinations as the points at which Sprint will hand off Toll relay service traffic to you. In this manner, any relay caller that wishes to use your services may be efficiently, and with minimal time delay, routed to your network. Should you not have a presence at one or more of the Sprint regional center/access tandem combinations, the traffic may be handed off at one of the regional center's access tandem. *Attachment C* is a sample letter of authorization. Once Sprint receives your written request to participate in the Sprint TRS Carrier of Choice program, Sprint will schedule translation updates in the next available release (usually 45 to 90 days). **Information obtained from the carriers will be used solely for the purpose of providing equal access for** (Company Name) **LD customers and shall be held proprietary.**

Sprint welcomes your company's participation in our TRS Carrier of Choice program at **no cost** to you if your company has network presence at any of our listed regional center/state access tandem locations. Your participation at the Sprint Carrier of Choice program will create a win-

win situation for our customers. Through Sprint, as the relay provider, customers will be able to enjoy uninterrupted service and your company will be able to generate additional revenue.
Thank you for your prompt attention to this matter. If you have any questions concerning with the letter, please do not hesitate to call (Account Manager) at (phone number) or email at (e-mail address).
Sincerely Yours,

(your name)

CC: Michael Fingerhut, Federal Regulatory, Sprint
Angela Officer, Program Manager, Sprint

Attachment A

Current participating members (facility-based providers) at Sprint TRS Carrier of Choice:

Entity	CIC Code
AT&T Communications	0288
Bell South Long Distance	0377
Bestline	0302
Birch Telecom	0678
Broadwing Communications	0948
Broadwing Telecommunications	0071
Cox Communications	6269
Excel Telecommunications, Inc.	0752
Global Crossings Telecommunications	0444
MCIWorldCom	0222
McLeod USA	0725
Qwest Communications	0432
SBC Communications Long Distance	5792
Souris River Telecommunications	0770
Sprint	0333
Telecomm*USA (MCIWorldCom)	0220, 0321, 0835, 0987
Touch America Services, Inc.	0244
U.S. Link	0355
VarTec dba Clear Choice Communications	0636
VarTec Telecom, Inc.	0465, 0638, 0811, 0899, 5111
Verizon Long Distance	5483
Winstar	0643
Working Assets	0649
WorldCom	0555, 0987
WorldXChange	0502, 0834

Updated: 8/12/07

Attachment B

Access Tandem Interconnection Locations

State	Access Tandem	Tandem CLLI	Tandem LEC
Missouri	Kansas City	KSCYMO5503T	SBC
Texas	Ft Worth	FTWOTXED03T	SBC
North Carolina	Charlotte	CHRLNCCA05T	Bell South
South Carolina	Charleston	CHTNSCDT60T	Bell South
New York	Syracuse	SYRCNYSU50T	Verizon
Ohio	Dayton	DYTNOH225GT	Ameritech
South Dakota	Sioux Falls	SXFLSDCO09T	Qwest
North Dakota	Bismarck	BSMRNDBC12T	Qwest
Arkansas	Little Rock	LTRKARFR02T	Southwestern Bel
Florida	Miami	NDADFLGG01T	Bell South
California	Sacramento	SCRMCA0103T	Verizon / Pac Bel
Colorado	Denver	DNVRCOMA02T	Qwest
Illinois	Chicago	CHCGILNE50T	Ameritech
Minnesota	Owatonna	OWTNMNOW12T	Qwest
Wyoming	Cheyenne	CHYNWYMA03T	Qwest

Updated: 8/12/07

Attachment C

S A M P L E Letter of Authorization

< DATE >

<Name>, Account Manager
<Street1> <Street2>
<City>, <State> <Zip Code>
FAX: <Fax. No.>

This letter of authorization has been issued to give Sprint TRS permission to send < Toll Carrier Company Name > toll traffic associated with 1+, 0+, and 0- and International dialing through Sprint TRS at the < Regional COC Tandems >.

I. Regional COC Tandems

You will need to provide Sprint with the following:

Toll Carrier: < insert name>

CIC Code: <insert CIC)

Underlying Toll Carrier: <insert name>
Underlying Carrier CIC Code: <insert CIC>

Choose Tandem Below

State	Access Tandem	Tandem CLLI	Tandem LEC
Missouri	Kansas City	KSCYMO5503T	SBC
Texas	Ft Worth	FTWOTXED03T	SBC
North Carolina	Charlotte	CHRLNCCA05T	Bell South
South Carolina	Charleston	CHTNSCDT60T	Bell South
New York	Syracuse	SYRCNYSU50T	Verizon
Ohio	Dayton	DYTNOH225GT	Ameritech
South Dakota	Sioux Falls	SXFLSDCO09T	Qwest
North Dakota	Bismarck	BSMRNDBC12T	Qwest
Arkansas	Little Rock	LTRKARFR02T	Southwestern Bel
Florida	Miami	NDADFLGG01T	Bell South
California	Sacramento	SCRMCA0103T	Verizon / Pac Bel
Colorado	Denver	DNVRCOMA02T	Qwest
Illinois	Chicago	CHCGILNE50T	Ameritech
Minnesota	Owatonna	OWTNMNOW12T	Qwest
Wyoming	Cheyenne	CHYNWYMA03T	Qwest

Updated 8/12/07

2. **Call Type Restrictions**

< Toll Carrier Brand Name > will accept any intrastate, international and operator services call types that will be routed to the < tandem location(s) > tandems.

OR

< Toll Carrier Brand Name > will accept any (*specify intrastate, interstate, international, and operator services*) call types except for (*specify what call types and restrictions*) that should not be routed to the < tandem location > tandems.

If there are any questions regarding this letter of authorization, please contact < Name >, < Job Title >, < Department Name > at xxx-xxx-xxxx.

Sincerely, < Name >< Job Title >, < Department Name >

Appendix F: Sprint Route Outage Prevention Programs

Call Before You Dig Program

This program uses a nationwide 800 number interlinked with all local/state government utility agencies as well as contractors, rail carriers, and major utilities. Sprint currently receives in excess of 60,000 calls per month for location assistance over the 23,000-mile fiber network.

Awareness Program

This Sprint program proactively contacts local contractors, builders, property owners, county/city administrators, and utility companies to educate them on Sprint's cable locations and how each can help eliminate cable outages.

Route Surveillance Program

This is a Network Operations department program using Sprint employees to drive specific routes (usually 120 miles) and visually inspect the fiber cable routes. This activity is performed an average of 11.6 times per month or approximately once every 2-3 days.

Technician Program

Technicians are stationed at strategic locations and cover an area averaging 60 route miles. Each technician has emergency restoration material to repair fiber cuts on a temporary basis. Other operations forces within a nominal time frame accomplish total repair.

Fiber/Switch Trending Program

This includes a weekly summary of equipment failure events highlighting bit error rate (BER) and cable attenuation. As a result, Sprint identifies potential equipment problems and monitors performance degradation to establish equipment-aging profiles for scheduled repair, replacement, or elimination. Aging profiles are computer-stored representations of the characteristics of a fiber splice. The profile is stored at the time the splice is accepted and put into service. A comparison of the original profile and current profile are compared for performance degradation. Maintenance is scheduled based on this type of monitoring.

Network Management and Control Systems

The Sprint network is managed and controlled by a National Operations Control Center (NOCC) located in Overland Park, KS. As a back up, a secondary NOCC is located in Lenexa, KS. The NOCC is designed to provide a national view of the status of the network as well as to provide network management from a centralized point. The NOCC interfaces with the Regional Control Centers (RCCs) to obtain geographical network status. The RCCs are responsible for maintenance dispatch and trouble resolution, and are designed to provide redundancy for each other and back-up status for the NOCC.

The NOCC and RCC work closely with the ESOCC in cases where a network problem may affect Nevada operations. In cases such as these, the NOCC or RCC immediately alerts the ESOCC of the situation so that appropriate steps can be taken to minimize service impacts. The NOCC and RCCs also serve as reference points for the ESOCC when problems are detected in the TRS center that are not the result of internal center operations.

Network Management

Commitment to a digital fiber optic network permits Sprint to use a single transmission surveillance protocol to integrate internal network vendor equipment. This enhances Sprint's ability to automate and provide preventive, near real-time detection and isolation of network problems. The controlling principle is identification and correction of potential problems before they affect the Nevada call capabilities.

Sprint divides the major functional responsibilities, facilities maintenance and network management, into a two-level organization which maximizes network efficiencies and customer responsiveness. The first level consists of the RCCs located in Atlanta and Sacramento. RCC personnel focus on the performance of individual network elements within predetermined geographical boundaries. The second level is the NOCC in Kansas City that oversees traffic design and routing for Sprint's 23,000-mile fiber optic network and interfaces.

This two-level operational control organization, combined with architectural redundancies in data transport and surveillance, control and test systems, ensures an expedited response to potential problems in both switched and private line networks.

In the event of a power outage, the UPS and backup power generator ensure seamless power transition until normal power is restored. While this transition is in progress, power to all of the basic equipment and facilities essential to the center's operation is maintained. This includes:

- Switch system and peripherals
- Switch room environmentals
- CA positions (consoles/terminals and emergency lights)
- Emergency lights (self-contained batteries)
- System alarms
- CDR recording

As a safety precaution (in case of a fire during a power failure), the fire suppression system is not electrically powered. Once the back-up generator is on line, stable power is established and maintained to all TRS system equipment and facility environmental control until commercial power is restored.

CAPTEL OUTAGE PREVENTION

Sprint will provide FCC compliant *CapTel* service from the two *CapTel* Service Centers in Madison and Milwaukee, WI. Sprint's *CapTel* vendor *CapTel Inc.* (CTI) operates the two current *CapTel* Service Centers in the nation. These unique Centers operate with enough terminals for 200 agents each, along with support personnel, Technicians, and Supervisors.

Both *CapTel* Service Centers are equipped with redundant systems for power, ACD/telecom switching equipment, call processing servers, data network servers, and LAN gear. Most equipment failures can be corrected without complete loss of service.

Having two *CapTel* Service Centers ensures minimum interruptions in service if something unexpectedly halts operations in one Center or the other such as a flood or a tornado. In those instances, traffic from one Center can automatically be routed to the other.

Appendix G: Disaster Recovery Plan

Sprint's comprehensive Disaster Recovery Plan developed for Nevada details the methods Sprint will utilize to cope with specific disasters. The plan includes quick and reliable switching of calls, network diagrams identifying where traffic will be rerouted if vulnerable circuits become inoperable, and problem reporting with escalation protocol. Besides service outages, the Nevada Disaster Recovery Plan applies to specific disasters that affect any technical area of Sprint's Relay network.

The first line of defense against degradation of Nevada is the Intelligent Call Router (ICR) technology that Sprint employs. During a major or minor service disruption, the ICR feature bypasses the failed or degraded facility and immediately directs calls to the first available agent in any of Sprint's eleven fully inter-linked TRS Call Centers. State-specific call processing software resides at each of Sprint's Relay Call Centers. Communications Assistants (CAs) are trained in advance to provide service to other States; the transfer of calls between centers is transparent to users.

Beyond the ICR, Sprint's Disaster Recovery Plan details the steps that will be taken to deal with any problem, and restore Nevada to its full operating level in the shortest possible time.

Nevada Notification Procedure

To provide Nevada with the most complete and timely information on problems affecting their TRS, the trouble reporting procedure for Nevada will include three levels of response:

- A 3-hour verbal report
- A 24-hour status report
- A comprehensive final report within 5 business days

Sprint will notify the Nevada within three hours if a service disruption of 30 minutes or longer occurs. For service disruptions occurring outside normal business hours, the initial report will be provided by 8:30 AM on the next business day. This initial report will explain how the problem will be corrected and an approximate time when full service will be restored. Within 24 hours of the service disruption, an intermediate report provides problem status and more detail of what action is necessary. In most cases, the 24-hour report reveals that the problem has been corrected and that full service to Nevada has been restored. The final comprehensive written report, explaining how and when the problem occurred, corrective action taken, and time and date when full operation resumed will be provided to the Nevada Administrator within five business days of return to normal operation. Examples of service disruption to Nevada include:

- ACD failure or malfunction
- Major transmission facility blockage
- Threat to Nevada CA's safety or other CA work stoppage
- Loss of CA position capabilities

Performance at each Sprint relay center is monitored continuously 24 hours a day, seven days a week from Sprint's Enhanced Services Operation Control Center (ESOCC) in Overland Park, KS.

Disaster Recovery Procedures

If the problem is within the relay center serving Nevada, maintenance can usually be performed by the on-site technician, with assistance from Sprint's ESOCC. If the problem occurs during non-business hours and requires on-site assistance, the ESOCC will page the technician to provide service remedies. Sprint retains hardware spares at each center to allow for any type of repair required without ordering additional equipment (except for complete loss of a center).

Time Frames for Service Restoration

Complete or Partial Loss of Service Due to Sprint Equipment or Facilities

- **Sprint Call Center Equipment** - A technician is on-site during the normal business day. The technician provides parts and / or resources necessary to expedite repair within two hours. Outside of the normal business day a technician will be on-site within four hours. The technician then provides parts and /or resources necessary to expedite repair within two hours.
- **Sprint or Telco Network Facilities** - For an outage of facilities directly serving Nevada, incoming TRS calls will immediately be routed to one of ten other centers throughout the US. No calls will be lost. Repair of fiber or network facilities typically requires less than eight hours.
- **Due to Utilities or Disaster at the Center** - Immediate rerouting of traffic occurs with any large-scale center disaster or utility failure. Service is restored as soon as the utility is restored, provided the Sprint equipment has not been damaged. If the equipment has been damaged the service restoration for Sprint equipment (above) applies.
- **Due to Telco Facilities Equipment** - A Telco equipment failure will not normally have a large effect on TRS traffic within the state unless it occurs on Telco facilities directly connected to the call center. In this case, normal Sprint traffic rerouting will apply. For a failure at a telco central office - In (CITY), for example, only local (CITY) residents would be affected until the Telco has performed the necessary repairs. For situations like this, it will be at Sprint's discretion to dispatch a technician. The normal Telco escalation procedures will apply. The Telco escalation process is all during the normal business day; therefore, a trouble may be extended from one day to the next.

Trouble Reporting Procedures

The following information is required when a Nevada user is reporting trouble:

- Service Description (Nevada)
- Caller's Name
- Contact Number
- Calling to/Calling from (if applicable)
- Description of the trouble

Service disruptions or anomalies that are identified by Nevada users may be reported to the Sprint Relay Customer Service 800 number (800-877-0996) at any time day or night, seven days a week. The Customer Service agent creates a trouble ticket and passes the information on to the appropriate member of Sprint's Maintenance Team for action. Outside the normal business day, the ESOCC will handle calls from the Customer Service agents 24 hours a day, 7 days a week.

The Maintenance Team recognizes most disruptions in service prior to customers being aware of any problem. Site technicians are on call at each of Sprint's11 TRS Call Centers to respond quickly to any event, including natural disasters.

Mean Time to Repair (MTTR)

MTTR is defined and detailed in Tables A-1 and A-2:

Table A-1 Time to Investigate + Time to Repair + Time to Notify

Time to Investigate	The time needed to determine the existence of a problem and its scope.
Time to Repair	Repair time by Field Operations plus LEC time, if applicable.
Time to Notify	From the time repair is completed to the time the customer is notified of repair completion.

Table A-2 Current MTTR Objectives

Switched Services	8 Hours
Private Lines	4 Hours (electronic failure)
Fiber Cut	8 Hours

Sprint's Mean Time to Repair is viewed from the customer's perspective. A critical element in the equation is the Time to Notify, because Sprint does not consider a repair complete until the customer accepts the circuit back as satisfactory.

Escalation Procedures

If adequate results have not been achieved within two hours, a Nevada user may escalate the report to the next level. Table A-3 details the escalation levels.

Table A-3 Escalation Levels

Escalation Level	Contact	Phone
2	Regional Maintenance Manager	Office Phone Number (913) 253-4394 Cell Phone Number Cell Phone 913-484-2263
3	Senior Manager, Technical Staff	Office Phone Number (913) 253-4396

Service Reliability

Sprint's service is provided over an all-fiber sophisticated management control networks support backbone networks with digital switching architecture that. These elements are combined to provide a highly reliable, proven, and redundant network. Survivability is a mandatory objective of the Sprint network design. The Sprint network minimizes the adverse effect of service interruptions due to equipment failures or cable cuts, network overload conditions, or regional catastrophes.

A 100 percent fiber-optic network, with significant fiber miles in Nevada, provides critical advantages over the other carriers. These advantages include:

- **Quality**

Since voice or data are transmitted utilizing fiber optic technology, the problems of outdated analog and even modern microwave transmission simply do not apply. Noise, electrical interference, weather-impacting conditions, and fading are virtually eliminated.

- **Economy**

The overall quality, architecture, and advanced technology of digital fiber optics makes transmission so dependable that it costs us less to maintain, thereby passing the savings onto our customers.

- **Expandability**

As demand for network capacity grows, the capacity of the existing single-mode fiber can grow. Due to the architecture and design of fiber optics, the capacity of the network can be upgraded to increase 2,000-fold.

- **Survivability**

Network survivability is the ability of the network to cope with random disruptions of facilities and/or demand overloads. Sprint has established an objective to provide 100 percent capability to reroute backbone traffic during any single cable cut. This is a significant benefit to Nevada, and a competitive differentiation of the Sprint network.

Currently, Sprint has over 23,000 miles of its fiber network in place and in service, with a fiber point of presence (POP) in every Local Access Transport Area (LATA). The one LATA in Nevada are served by three Sprint POPs. There are plans for additional fiber mileage, additional POPs, and added route diversity. There are more than 300 POPs in service on the network. With three POPs in the state, all areas will be adequately serviced by Sprint.

Switched services are provided via 49 Northern Telecom DMS-250/300 switches at 29 locations nationwide. Three DMS-300s located at New York, NY; Fort Worth, TX; and Stockton, CA, serve as international gateways. The remaining 46 switches provide switching functions for Sprint's domestic switched services. Nevada would primarily be served by the DMS switches in Reno, with other diversely located facilities also serving Nevada.

Interconnection of the 49 switches is provided in a non-hierarchical manner. This means that inter-machine trunk (IMT) groups connect each switch with all other switches within the network. Each of these IMT groups is split and routed through the Sprint fiber network over SONET route paths for protection and survivability. As an extra precaution to preclude any call blockage, Dynamically Controlled Routing (DCR) provides an additional layer of tandem routing options when a direct IMT is temporarily busy.

Reliability is ensured through a corporate commitment to maintain or surpass our system objectives. Beginning with the network design, reliability and efficiency are built into the system. Sprint continues to improve the network's reliability through the addition of new technologies such as Digital Cross-connect Systems, SONET, and Signaling System 7.

The effectiveness of this highly reliable and survivable network is attributed to the redundant transmission and switching hardware configurations, SONET ring topology, and sophisticated network management and control centers. These factors combine to assure outstanding network performance and reliability for Nevada.

Network Criteria

System Capacity

The Sprint network was built with the capacity to support every interLATA and intraLATA call available in the US. With the continuing development of network fiber transmission equipment to support higher speeds and larger bandwidth, the capacity of the Sprint network to support increasing customer requirements and technologies is assured well into the future.

Sprint Outage Notification from *CapTel* Service Center

Performance at the *CapTel* Service Center is monitored continuously by CTI technicians 24 hours a day, seven days a week. Sprint will be notified by the *CapTel* Service Center Manager immediately upon determination of any type of natural or man-made problem that causes either:

- A complete (100 percent) loss of the *CapTel* Service Center, OR
- Any partial loss of service in excess of 15 minutes that is service affecting. Examples of such a loss in service include:
  - An accidental switch rebooting
  - Loss of transmission facilities through the telephone network
  - Terrorist attack
  - Bomb threat or other work stoppage
  - Sudden loss of agent position capabilities.
  - Impact to minimum ASA / Speed of Answer times
  - Acts of God

Contact from the *CapTel* Service Center Manager or designated CTI contact person will be made to the assigned contact people at Sprint immediately upon awareness of an outage meeting the above criteria, 24 hours a day, seven days a week including holidays with the following documentation:

1) What time did the outage happen in CENTRAL TIME?
2) What caused it?
3) Which customers are (or were) impacted?
4) What is (was) the solution to restore service?
5) What is the time that service will be (or was restored by) IN CENTRAL TIME?

Sprint Procedure for Outage Notification to Contract Administrators during Business Hours

Upon receiving notification from CTI during business hours (8AM to 5PM CT), Sprint will have one of the below managers contact the Contract Administrator, depending on availability:

	Point of Contact (POC)	Position	Contact Information
1	John Moore	Relay Program Management Mgr.	P: (925) 468-4345 M: (925) 895-9176 E: John.E.Moore@sprint.com
2	Angela Officer	Relay Program Manager	P: (703) 689-5654 E: Angela.Officer@sprint.com
3	Assigned On-Call Relay Program Manager	Relay Program Manager	Assigned as necessary

Upon receiving notification from CTI, Sprint will assess the problem and contact will be made by email to the Contract Administrator.

In cases of partial loss of service, such as several inoperable CA positions or, local area network outages, the *CapTel* Center on-site technician will notify *CapTel* Service Center to schedule repair. Only those partial losses of service that are service affecting in excess of 15 minutes will be email to the state Contract Administrator.

If the problem is within the *CapTel* Center, maintenance can usually be performed by the on-site technicians. Hardware spares are retailed at the *CapTel* Service center to allow for the most common type of repair required without the ordering of additional equipment.

Sprint Procedure for Outage Notification to Contract Administrators outside of Business Hours

Upon receiving notification from CTI outside of business hours (5PM to 8AM CT, Monday through Friday, and all day Saturday, Sunday and holidays), John Moore (or Angie Officer) will notify Contract Administrators immediately by email of an outage if possible, but by no later than 8AM CT the next business day. Follow-ups and post-mortem will still be provided within the required guidelines.

Disaster Recovery Follow-Up

Upon notifying customers of an outage, Sprint's contact person will provide regular updates from CTI to all customers and internal team members. The follow up will be kept in sync with CapTel Customer Service so that the information shared with customers from CTI is the same as what customers receive from Sprint.

Disaster Recovery Post-mortem documentation

72 hours (3 days) after the outage is resolved, CTI will need to provide a formal written analysis of the outage to the designated Sprint people (outlined above).

Sprint will send a document with the analysis to the Contract Administrator. John Moore will be the primary point of contact for the letter to be shared with customers. If John Moore is not available, then Angie Officer will provide the letter directly to customers.

1) What time did the outage happen in CENTRAL TIME?
2) What caused it?
3) Which customers are or were impacted?
4) What is the solution to restore service?
5) What is the time that service will be or was restored IN CENTRAL TIME?
6) What will *CapTel,* Inc do to prevent this from happening again?

CTI will be available to answer questions from Contract Administrators through Sprint.